REMARKS

The Official Action dated November 26, 2003 has been carefully considered. Accordingly, the changes presented herewith, taken with the following remarks, are believed sufficient to place the present application in condition for allowance. Reconsideration is respectfully requested.

By the present Amendment, the Abstract portion of the application has been amended to place it in better form, in response to the objections made by the Examiner.

Claims 1-2, 5, 9, 23-25, 28, 32 and 46 are rejected under 35 USC 102(e) as being anticipated by Longdon et al (US 6,596,354). Claims 1, 5, 9, 11, 23-24, 28, 32, 34 and 46 are rejected under 35 USC 102(b) as being anticipated by Detwiler, II et al (US 5,718,456). Claims 1-2, 5, 9, 24-25, 28 and 32 are rejected as being anticipated by Simons (US 2,445,586). Claims 1-6, 9-12, 23-29, 32-34, 36 and 46 are rejected under 35 USC 103(a) as being unpatentable over Wood (US 4,037,007) in view of Detwiler, II et al or Longdon et al. Claims 7-8 and 30-31 are rejected as being unpatentable over Wood in view of either Detwiler, II et al or Longdon et al as applied to claims 1-6, 9-12, 23-29, 32-34, 36 or 46, and further in view of Kawashima (US 5,196,243). Claims 13-19, 35 and 37-42 are rejected as being unpatentable over Wood in view of either Detwiler, II et al or Longdon et al as applied to claims 1-6, 9-12, 23-29, 32-34, 36 or 46, and further in view of Dotson et al (US 5,698,296). Claims 20-22 and 43-45 are rejected as being unpatentable over Wood in view of either Detwiler, II et al or Longdon et al as applied to claims 1-6, 9-12, 23-29, 32-34, 36 or 46, and further in view of Mehta et al (US 6,413,305).

Turning to the rejection of claims 1-2, 5, 9, 23-25, 28, 32 and 46 under 35 USC 102(e), it should be pointed out that these claims are not anticipated by Longdon et al. Claim 1, for example, specifies:

> A method for authenticating security paper comprising:
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> placing an authenticating solution on at least one surface of said security paper, said authenticating solution comprising an acid-base indicator in non-ionic form and having an original pH; and
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> applying to said surface of said security paper an activating solution comprising an acid or base selected to produce a characteristic color change of said acid-base indicator and thereby authenticating said

security paper, wherein said characteristic color change will disappear when the activating solution dries.

Claim 24 similarly specifies:

24. A security paper authenticating system comprising:

a security paper having an authenticating solution on at least one surface of said security paper, said authenticating solution comprising an acid-base indicator in non-ionic form and having an original pH; and

an activating solution comprising an acid or base selected to produce a characteristic color change of said acid-base indicator, wherein on applying the activating solution to said security paper a color change occurs that reverses when said activating solution dries.

All of the other claims listed above as rejected as anticipated by Longdon et al depend either directly or ultimately from claims 1 or 24. Note the recitations in claims 1 and 24, above, that the indicator is in non-ionic form on the security paper and that the color change which is produced when the activating solution is applied to the security paper reverses when the activating solution dries. There is no such teaching in Longdon et al. In point of fact, Longdon teaches that "after the coloured mark has been observed, the marked area can be contacted with a chemical which reacts with the dyestuff to change it back to its original colour, for example the colourless and invisible form of a latent dyestuff." Column 3, lines 5-9 of the Longdon et al patent. Nothing in Longdon et al teaches a reversion to the original color of the non-ionic acid-base indicator in the authenticating solution when the activating solution dries. In view of this, it is submitted that claims 1-2, 5, 9, 23-25, 28, 32 and 46 are not anticipated by Longdon et al.

Turning to the rejection of claims 1, 5, 9, 11, 23-24, 28, 32, 34 and 46 under 35 USC 102(b), it should be pointed out that these claims are not anticipated by Detwiler '456. As with Longdon et al, there is no discussion or suggestion in Detwiler '456 of a reversion to the original color of a non-ionic acid-base indicator in an the authenticating solution when an activating solution dries. The specification is silent as to such reversion, and the claims of the Detwiler '456 patent all call for "causing said ink to permanently change to a second color . . . ." (Emphasis added). As a consequence, it is clear that Detwiler '456 does not anticipate these claims.

Turning to the rejection of claims 1-2, 5, 9, 24-25, 28, and 32 under 35 USC 102(b), it should be pointed out that these claims are not anticipated by Simons. As with Longdon et al and Detweiler '456, there is no discussion or suggestion in Simons of a reversion to the original color of a non-ionic acid-base indicator in an authenticating solution when an activating solution dries. The Simons patent does not teach reversibility and does not imply it. At column 8, lines 9-27 there is a discussion of the preparation of a solution and its application as a coating. It is noted that the phenolphthalein in the coating composition changes to a colorless form due to a chemical reaction as the coating composition dries. This does not imply a later reversion to a colorless form after an activating solution causes a color change. The Simons patent teaches an acid soluble dye in the coating composition for color change when a pH neutral or acidic water solution is applied. Phenolphthalein is used in the Simons coating composition to provide a non-reversing color change if a pH basic solution is applied to the coating.

Note that Simons consistently teaches a non-reversing color change:

1.) Column 1, lines 7-11 - "It is a further purpose of this invention to provide a coating of the character aforesaid wherein the developed color change persists after the moisture that effects the color change has evaporated from the coating."

2.) Column 2, lines 13-18 - "If the fingers are moistened, even only slightly, the moisture on the fingers will cause color to develop on the paper in the distinguishing fingerprint patterns and the fingerprints will remain permanently upon the paper."

3.) Column 4, lines 63-66 - "Moreover, when the moisture applied to the coating dries out, the coating remains colored wherever the moisture had been applied thereto."

Turning to the rejection of claims 1-6, 9-12, 23-29, 32-34, 36 and 46 under 35 USC 103(a) as unpatentable over Wood in view of either Detwiler '456 or Longdon et al, it should be pointed out that none of these claims is obvious over the cited combination of references. Quite clearly, the Examiner has not presented a *prima facie* case of obviousness. For example, none of these references teaches or suggests a characteristic color change that will

disappear when an activating solution dries. Detwiler '456 and Longdon et al have both been discussed above in this regard. This is equally true of the Wood reference, which teaches only color-forming reactions that permanently change the appearance of a security document. None of the three references teaches applying an activating solution to produce a characteristic color change, which color change disappears or reverses when the activating solution dries. Any combination of the three references that might be cobbled together would still be missing this aspect of the invention.

Further, it should also be pointed out that the references are devoid of a teaching or suggestion that would lead a person of ordinary skill to combine the references in any manner. The Examiner states that Wood teaches that "any known color changing substance can be used to print onto the security paper . . . ." as the basis for combining the color changing indicators of Detwiler '456 and Longdon et al with those of Wood. Actually, Wood does not teach this at all. Rather, Wood suggests that different color formers and reagents may be used in chemical reactions to change color. There is simply nothing suggesting that the combination of references beyond the hindsight use of the disclosure of the present application.

Turning to the rejection of claims 7-8 and 30-31 as unpatentable over Wood in view of either Detwiler '456 or Longdon et al as applied to claims 1-6, 9-12, 23-29, 32-34, 36 or 46, and further in view of Kawashima, it should be pointed out that none of these claims is obvious over the cited combination of references. Quite clearly, the Examiner has not presented a *prima facie* case of obviousness. The references do not disclose 1.) placing an authenticating solution including an acid-base indicator in non-ionic form on at least one surface of security paper, 2.) applying an activating solution comprising an acid or base selected to produce a characteristic color change of said acid-base indicator, thereby authenticating the security paper and 3.) wherein the characteristic color change disappears when the activating solution dries. While Kawashima discloses a reversible color change process, it is not used for authentication. Rather, Kawashima prints answers in invisible ink in a text book, allowing the student to render the answers visible with an activating solution which later dries and reverts in color to its original state. This permits repeated use of the

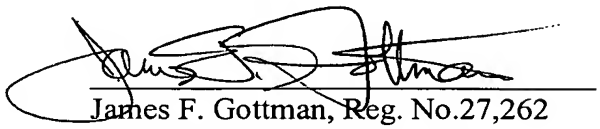
text book. The combination of references by the Examiner here is made possible only by impermissibly using the instant application as a roadmap for the combination.

Finally, turning to the rejection of claims 13-19, 35 and 37-42 as unpatentable over Wood in view of either Detwiler '456 or Longdon et al as applied to claims 1-6, 9-12, 23-29, 32-34, 36 or 46, and further in view of Dotson et al, and the rejection of claims 20-22 and 43-45 as unpatentable over Wood in view of either Detwiler '456 or Longdon et al as applied to claims 1-6, 9-12, 23-29, 32-34, 36 or 46, and further in view of Mehta et al, it should be pointed out that none of these claims is properly rejected as obvious.

The Wood, Detwiler '456 and Longdon et al references are addressed above. The defects in the combinations of these references are pointed out as well. With regard to Wood, Detwiler '456 and Longdon et al, the Examiner has not presented a *prima facie* case of obviousness. For example, none of these references teaches or suggests a characteristic color change that will disappear when an activating solution dries. Further, these references are devoid of a teaching or suggestion that would lead a person of ordinary skill to combine them in any manner. Dotson et al and Mehta et al fail to deal with the deficiencies in these combinations of references. As a result, it is submitted that the rejected claims are patentable for the same reasons as presented above with respect to the claims from which they ultimately depend.

It is believed that the above represents a complete response to the rejections, and places the present application in condition for allowance. Reconsideration and an early allowance are requested.

Respectfully submitted,



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